

QLogic 12200 QDR InfiniBand Switch

QLogic Corporation
All rights reserved

Table of Contents

- [1. Version](#)
- [2. Changes](#)
- [3. Bug Fixes](#)
- [4. Known Issues](#)
- [5. Additional Information](#)
- [6. Trademarks](#)
- [7. Notices](#)
- [8. Contacting Support](#)

1 Version

These release notes describe the changes, fixes, known issues, and release details that apply to the hardware and firmware version 7.1.0.0.58 for the QLogic 12200 QDR InfiniBand® (IB) switch.

NOTE:

For users that have a 12200 switch with the optional management module installed, please refer to the QLogic 12000 Family of QDR IB Switches release notes for detailed release information.

2 Changes

The following changes have been made to the QLogic 12200 QDR IB switch between versions 7.0.1.0.43 and 7.1.0.0.58.

Hardware Support

No changes.

OS Support

No changes.

Software Components

- ◆ QLogic 12200 QDR externally-managed firmware (EMFW) version 7.1.0.0.58 (QLogic_12000_V1_firmware.7.1.0.0.58.emfw). For upgrade instructions, refer to the *QLogic FastFabric User Guide*, or the *OFED+ Host Software Users Guide* (for information on using the `iba_manage_switch` command).

NOTE:

The QLogic_12000_V1_firmware.7.1.0.0.58.emfw firmware file should not be used on any other 12000-series switch.

Industry Standards Compliance

N/A

3 Bug Fixes

The following fixes have been made to the QLogic 12200 QDR IB switch:

Between 7.0.1.0.43 and 7.1.0.0.58:

- ◆ When thousands of nodes are rebooted in a fabric being managed by OpenSM, there are no longer intermittent connection issues on a small number of nodes.

Between 7.0.0.0.35 and 7.0.1.0.43:

- ◆ None

Between 6.1.0.3.1 and 7.0.0.0.35:

- ◆ None

Between 6.1.0.2.1 and 6.1.0.3.1:

- ◆ Modified ISL Serdes settings to improve SI margins

Between 6.1.0.0.72 and 6.1.0.2.1:

- ◆ Corrected the issue where links may take longer to initialize when the 12200 is configured for 1x/4x/8x operation versus 1x/4x.
- ◆ Corrects infrequent port initialization errors, including links failing to initialize.
- ◆ 12200 systems shipped with 6.1.0.2.1 (or newer) have their ports configured for 1x/4x operation by default. 12200 systems shipped with 6.1.0.0.72 (or earlier) were shipped with ports configured for 1x/4x/8x operation by default.

Between 6.0.2.1.11 and 6.1.0.0.72:

- ◆ None

Between 6.0.2.0.28 and 6.0.2.1.11:

- ◆ None

Between 6.0.1.0.31 and 6.0.2.0.28:

- ◆ Ports in the down/training state can now be disabled and enabled properly.
- ◆ Certain sequences of bad packets arriving at a port will no longer cause the port to hang.
- ◆ Externally-managed 12200 ports connected to a 12800-series switch will now come up when OpenSM sets the `LinkWidthEnabled` field of these ports to 1x or 4x.

Between 6.0.0.4.2 and 6.0.1.0.31:

- ◆ The OFED commands `ibportstate enable` and `ibportstate disable` now work correctly with the 12200 switch.
- ◆ Signal integrity has improved for confirmed 1 meter cables on 12200 ISL ports.

Between 6.0.0.2.7 and 6.0.0.4.2:

- ◆ Links no longer bind in the Init or Polling state after a link down event.
- ◆ Link flow control parameters have been adjusted to better handle high-stress workloads.

Between 6.0.0.0.54 and 6.0.0.2.7:

- ◆ None. Firmware level revised to match the 12000-series managed switches.

Between 5.0.5.0.1 and 6.0.0.0.54:

- ◆ The definition of the `PHYS_STATE` of a port has been modified. The port `PHYS_STATE` is now determined sequentially (that is, if not 1 then 2, etc.) by the following rules:
 1. **Disabled:** if a port was most recently set to disabled by a Subnet Manager Agent (SMA) packet, and the time that the port was not explicitly disabled through the command line interface (CLI) (for example, `ismPortDisable`).
 2. **Sleeping:** if a port was most recently set to sleeping by an SMA packet, and from that point, the port has not been explicitly disabled through the CLI.
 3. **Disabled:** if a port has been explicitly disabled via the CLI (for example, `ismPortDisable`).
 4. **Sleeping:** if a port is an IB cable port, and the quad small form-factor pluggable (QSFP) is not online; or if the port is an ISL port, and the corresponding leaf/spine for that ISL is not installed in the chassis.
 5. **Polling:** the InfiniBand Trade Association (IBTA)-defined link training state.

4 Known Issues

The QLogic 12200 family of QDR IB switches, version 7.1.0.0.58, has the following known issues:

None.

5 Additional Information

5.1 Included in this release:

- ◆ QLogic 12200 QDR externally-managed firmware version 7.0.1.0.58 (`QLogic_12000_V1_firmware.7.0.1.0.58.emfw`) for the following switches:
 - QLogic 12200-BS01
 - QLogic 12200-BS18
 - QLogic 12200-BS23

5.2 Miscellaneous:

- ◆ Before upgrading the 12200 switch to 7.1.0.0.58, make certain that either the InfiniBand Fabric Suite (IFS) v6.0.2.0.28 (or greater), or OFED+ v7.0.1 or greater is installed on your host. If using IFS, use the FastFabric toolset to update the 12200 to the 7.1.0.0.58 EMFW file. If using OFED+, use the `iba_manage_switch` command to update the 12200 to the 7.1.0.0.58 EMFW file.

For upgrade instructions, refer to the *QLogic FastFabric User Guide* (if using IFS), or the *OFED+ Host Software Users Guide* (for information on using the `iba_manage_switch` command).

- ◆ QLogic products will auto-negotiate with devices that utilize IBTA-compliant auto-negotiation.
- ◆ When attaching QLogic products to a third-party device, the bit error rate is optimized if the third-party device utilizes attenuation-based tuning.
- ◆ The maximum time that a 12200 switch will take to reboot is 120 seconds. Reboot times in your environment may be much less.
- ◆ For most configurations, using the default MTU size of 2K is recommended.
- ◆ For switches shipped with firmware version 6.1.0.0.72 (or earlier), when connecting two externally-managed 12200 switches together, please see the “Creating an 8x Port: Externally-managed 12200” section of the *QLogic 12000 Hardware Installation Guide* for cabling recommendations.

NOTE: For 12200 switches shipping with firmware version 6.1.0.2.1 (or newer), the default configuration (1x/4x) is recommended unless there is a specific need to use 8x links.

6 Trademarks

Accelera, Accelerating Cluster Performance, FastFabric, InfiniCon Systems, InfiniNIC, InfiniPath, InfiniView, Intelligent NIC, Networking University, NetXen, QLogic, the QLogic logo, ReadyPath, SANdoctor, SANSurfer, and SilverStorm are registered trademarks of QLogic Corporation.

To the extent a name or logo does not appear on this list does not constitute a waiver of any and all intellectual property rights that QLogic Corporation or its subsidiaries has established in any of its product, feature, or service names or logos. All other brand and product names are trademarks or registered trademarks of their respective owners.

7 Notices

Information furnished in this document is believed to be accurate and reliable. However, QLogic Corporation assumes no responsibility for its use, nor for any infringements of patents or other rights of third parties which may result from its use. QLogic Corporation reserves the right to change product specifications at any time without notice. Applications described in this document for any of these products are only for illustrative purposes. QLogic Corporation makes no representation nor warranty that such applications are suitable for the specified use without further testing or modification. QLogic Corporation assumes no responsibility for any errors that may appear in this document.

8 Contacting Support

Please feel free to contact your QLogic approved reseller or QLogic Technical Support at any phase of integration for assistance. QLogic Technical Support can be reached by the following methods:

Web: <http://support.qlogic.com>

E-mail: support@qlogic.com

[Go to Top](#)



© Copyright 2012. All rights reserved worldwide. QLogic, the QLogic logo, and the Powered by QLogic logo are registered trademarks of QLogic Corporation. All other brand and product names are trademarks or registered trademarks of their respective owners.